

*FISCAL YEAR 2008
ANNUAL NARRATIVE REPORT
October 1, 2007 - September 31, 2008*



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***Editor's Note:** Due to the minimal number of assigned personnel and in an effort to provide an accurate product staff writing this narrative only included information with supporting documentation or known validity. As a result, this is a vary general narrative.

INTRODUCTION

Swan Lake National Wildlife Refuge (NWR) was established by Executive Order 7563 under President Franklin D. Roosevelt on February 27, 1937. The primary purpose for establishing the refuge was to provide a nesting, resting and feeding area for migrating waterfowl, primarily ducks. Purchase of the 10,795 acres began at that time with money from the "N.I.R., Agriculture, Wildlife Refuge Funds". Following purchase of the land, the Civilian Conservation Corps began work on the refuge creating wetlands, constructing roads and buildings, and initiating the refuge farming program.

Since establishment of the refuge, the primary emphasis on waterfowl species has changed from ducks to the Eastern Prairie population on Canada Geese. Canada geese were first observed using the refuge in the early 1940's, and numbers increased gradually to peak populations of 150-200,000 annually during the early 1970's. Swan Lake NWR is now a primary wintering area for one of the largest concentrations of Canada Geese in North America.

The refuge lies in the glacial till plain of north-central Missouri, in Chariton County, near the town of Sumner. It is located near the confluence of the Grand and Missouri Rivers, and is bordered on the south by Yellow Creek. Most of the refuge is relatively flat, with elevations ranging from a minimum of 653.96 MSL to a maximum of 741.56 MSL.

The refuge acreage is divided into five major habitat types: 1,000 acres of bottomland hardwood, 3,840 acres of wetlands and moist soil units, 1,950 acres of cropland, 3,050 acres of open water and 600 acres of grasslands.

Enactment of the 1985 Food Security Act resulted in additional responsibilities for the refuge, primarily through establishment of conservation easements on Farmer's Home Administration (FmHA) inventory properties. Beginning in 1988, FmHA properties were reviewed and easements established to be managed as part of the National Wildlife Refuge System. Due to the large numbers of FmHA properties in this portion of Missouri, easement management has and continues to be a major activity. Farmer's home Administration has recently undergone reorganization and is now included under the new Farm Service Agency (FSA).

- **Refuge Personnel**

- There were only two permanent full-time employees at the refuge for the first six months of the year. The Project Leader Steve Whitson & Equipment Operator Levi Miller.



- In July and August two additional full-time positions were filled by John Benson, The Office Assistant & Shane Miller, a Maintenance Worker.



- The Refuge hired Annmarie Krmpotich as a Bio-Science Technician to monitor the Reed Canary Grass units and assist with testing for Avian Influenza.



- **Refuge Personnel Continued**

- Rick Shatto was hired in the Fall of 2008 as a Part-time Maintenance Worker.



- The Youth Conservation Corp (YCC) had 4 members this year. (Sierra Bangs, Mathew Jacobs, Casey Childress & Caleb Cochenour) The YCC projects were visible, tangible, and meaningful, and they had achievable goals. They had educational aspects, were environmentally sound and fulfilled an unmet yet valuable need at the refuge. They performed the following activities:

- ◆ Constructed Concrete Work Camper Pads
- ◆ Stripped and painted Maintenance Shop Floor
- ◆ Stained board-walk to Handicap Hunting Blind
- ◆ Removed debris from levees after flooding
- ◆ Landscaping (mowing and weed eating)
- ◆ Janitorial Service (Cleaning Visitor Center)
- ◆ Remodeling of Refuge Manager's Office



2008 YCC members



Working on the Camper pads

- **Training**
 - Below is a breakdown of the training attended by each employee
 - ◆ Steve Whitson, Project Manager
 - CPR
 - First Aid
 - Ethics
 - Orientation to the Privacy Act
 - Federal Information Systems Security Awareness
 - RO new Refuge Manager Orientation
 - Region 3 Biologist Workshop
 - ◆ John Benson, Office Assistant
 - Website Training
 - SAMMS
 - Fire Fighting
 - CPR
 - First Aid
 - GovTrip
 - ATV Safety
 - Ethics
 - Combination Helicopter/Airplane Safety
 - Aviation Life Support Equipment
 - Preflight Checklist Briefing and Debriefing
 - Crash Survival
 - New Employee Orientation
 - Career Planning and the IDP
 - AAA Driver Improvement Records Management
 - Orientation to the Privacy Act
 - Federal Information Systems Security Awareness
 - ◆ Shane Miller, Equipment Operator
 - Heavy Equipment
 - CDL
 - CPR
 - First Aid
 - Fire Fighting
 - ATV Safety
 - Orientation to the Privacy Act
 - Federal Information Systems Security Awareness Ethics
 - Combination Helicopter/Airplane Safety
 - Aviation Life Support Equipment
 - Preflight Checklist Briefing and Debriefing
 - Crash Survival

- **Flooding and Weather**

- Due to the severe weather all year the refuge experience major flooding issues 15 times which hampered the operational needs of the refuge.
- Below is a chart showing the monthly High & Low temperature and the total monthly precipitation. As this chart indicates, the Refuge received a significant amount of rain during the Spring and Summer months making it nearly impossible to perform work on the moist soil units in preparation of the 2008 migratory bird season

Month	Temperature		Total Precipitation
	High	Low	
October 2007	88	28	5.04
November 2007	76	17	.41
December 2007	61	5	3.60
January 2008	67	-5	.86
February 2008	62	1	3.33
March 2008	75	9	2.45
April 2008	80	28	6.43
May 2008	87	35	4.94
June 2008	90	53	7.79
July 2008	95	57	6.73
August 2008	95	54	2.99
September 2008	89	43	7.93

- The following picture so the impacts of flood water in several locations on the refuge.



Main entrance Levee



Main Entrance Levee



Patrol Road



Patrol Road by V & W blinds

2008 Refuge Flooding Pictures continued:



Route E



Reed Canary Grass Plot on Rte E



Main Entrance Levee

- We constantly monitor the water level of the Grand River at Sumner using the following website: <http://www.crh.noaa.gov/ahps2/index.php?wfo=eax>
- Below are the “flood impact” levels for the Grand River at Sumner that have significant effects towards Swan Lake NWR and the surrounding area:
 - 52.0 Water reaches the road surface of state highway 139 bridge.
 - 45.0 Water reaches the bottom of state highway 139 bridge.
 - 44.0 Water reaches the bottom of the Burlington northern railroad bridge...located just upstream from the state highway 139 bridge.
 - 40.0 Homes in northeast Sumner begin to flood.
 - 37.0 State highway 139 floods 0.5 miles east of Sumner.
 - 28.0 Rural roads are under water.
 - 26.0 Rural land adjacent to the river is flooded.
 - 23.0 Bottomland 1 to 2 miles south of the gage begins to flood.

- Below is a chart showing the amount of water flowing on the Grand River in Sumner, MO

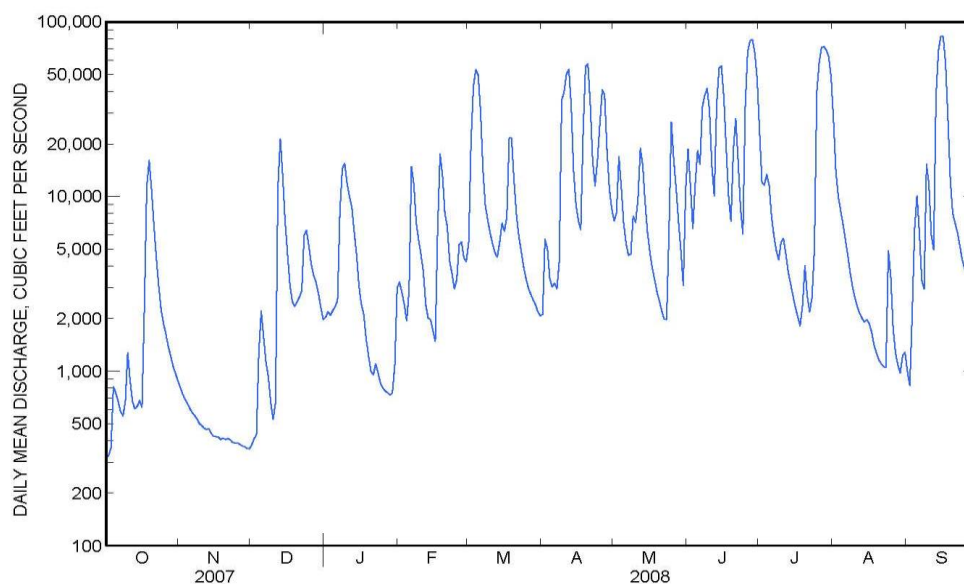
Water-Data Report 2008

06902000 GRAND RIVER NEAR SUMNER, MO—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1925 - 2008	
Annual mean	4,710		10,490		4,167	
Highest annual mean					17,390	1993
Lowest annual mean					367	1934
Highest daily mean	93,800	May 11	82,700	Sep 15	166,000	Jun 8, 1947
Lowest daily mean	200	Feb 17 ^a	318	Oct 1	10	Aug 12, 1934
Annual seven-day minimum	209	Feb 13	372	Nov 25	12	Aug 7, 1934
Maximum peak flow			94,500	Sep 15	180,000	Jun 8, 1947
Maximum peak stage			40.45	Jun 28	42.52	Jul 10, 1993
Instantaneous low flow			318	Oct 1	10	Aug 12, 1934
Annual runoff (inches)	9.30		20.77		8.23	
10 percent exceeds	11,100		33,400		10,200	
50 percent exceeds	1,030		4,260		964	
90 percent exceeds	324		618		132	

^aAlso Feb 18, 19



- **Yellow Creek Log Jam**

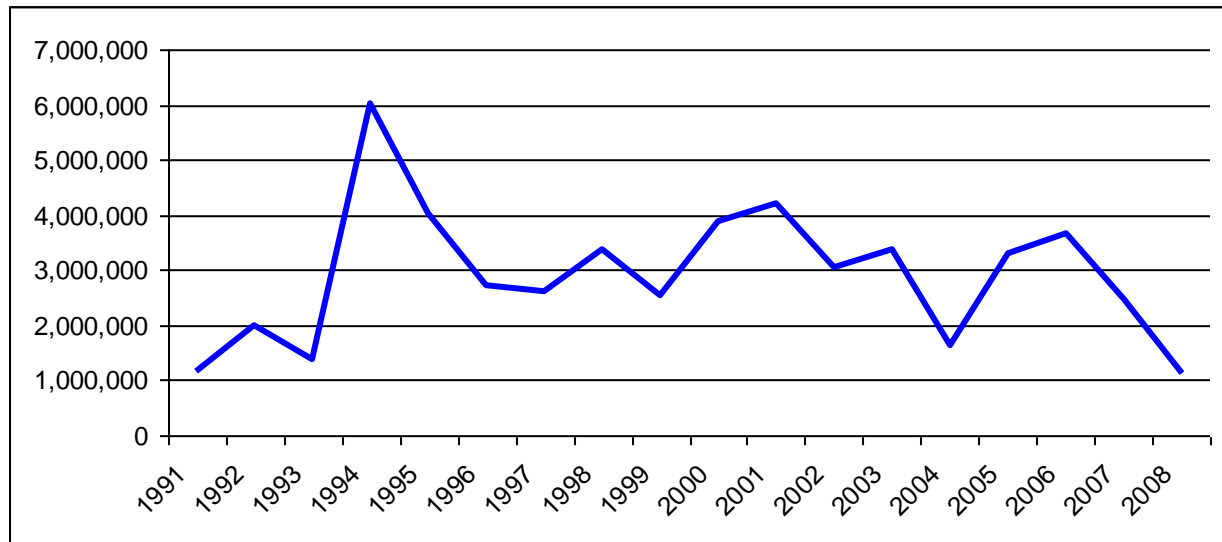
- Major factor which contributed to our flooding problems was a ½ mile log jam on the Yellow Creek.
- ◆ The log jam was surveyed and working with the US Corp of Engineers & the Missouri Department of Conservation plans were developed to have the log jam removed.
- ◆ All the paperwork was set to the Contracting at RO and requests for bids went out late in the year.
- ◆ The following are pictures of the logs jam;



- **Bird Count**

- Ducks

- ◆ 1,128,206 was the total number of ducks count on the refuge for 2008.
 - ◆ Below is a chart showing the year totals of ducks counted on the refuge over past 17 years



- Goose (Wanting for info from MDC)

- Big Sit

- ◆ Here is a list of bird seen during the Big sit on 12 Oct 2008:

Barred Owl, Great Blue Heron,
Pelican, Cormorant, Great Horned
Owl, Killdeer, Blue Jay, Cardinal,
Carolina Wren, Wood Duck,
Northern Pintail, Blue-winged Teal,
Kingfisher, Bald Eagle, Northern
Flicker, Ring-billed Gull, Red-
winged Blackbird, American Coot,
Franklin's Gull, Pied-billed Grebe,
Barn Swallow, Common Grackle,
Red-bellied Woodpecker, Crow,
Tree Swallow, Robin, Purple
Martin, Bank Swallow, Lesser

Yellowlegs, Forester's Tern, Green-
winged Teal, Tufted Titmouse, Grey
Catbird, Gadwall, Brown-headed
Cowbird, Mallard, Great Egret,
Downey Woodpecker, Bonaparte's
Gull, Greater White-fronted Goose,
Turkey Vulture, Pectoral, Sandpiper
Greater Yellowlegs, Northern
Rough-winged Swallow, Least
Sandpiper, Eastern Bluebird,
Eastern Phoebe, American
Widgeon, Northern Harrier, and
Semi-palmated Sandpiper

- **Fire Management**

- The following units were burned during the Spring months:
 - ◆ G18 - 140 acres
 - ◆ Hunting HQs - 12 acres
 - ◆ M7 - 25 acres
 - ◆ G19 - 32 acres
 - ◆ G31 - 110 acres
 - ◆ G31B - 30 acres
 - ◆ G31B - 35 acres

- **Planning and Administration**

- The refuge was visited by the Region 3 Director, Robin Thorsen as well as the Region 3 Chief of Refuges, Nita Fuller



Robin Thorsen, Regional Director

- During the year summer months the Friends Group called “Friend of Swan Lake” was established and the following officers were elected:
 - ◆ President - Darrel Stanley
 - ◆ Vice-President – Richard Mauzey
 - ◆ Treasurer – Daryll Young
 - ◆ Secretary – Myrna Carlton
 - ◆ Board Members – Sharon Shatto, Shirley Fountain, Dorothy Kaye, Clark Milligan, Steve Kinder, Doris Fitchett, Marshal Murphy, John Quinn & Amy Peoples

- **Public Education & Outreach**

- The refuge manager delivery and educational briefing concerning the refuge and wildlife to the summer school student at the Tina-Avalon School in Tina, MO.

- During the Annual Summer Goose Festival and Youth Game Fair at Dean Lake, the refuge manned a booth to provide the general public with information about the refuge and also handed out pamphlets for the Friends Group.



- The 2008 Annual “Volunteer of the Year” and Appreciation Ceremony was held on October 14th with the following results:
 - ◆ Volunteer of the Year – Carla Epperson
 - ◆ Receiving “Refuge Ambassadors” awards were: City of Sumner, Swan Lake Sportsman Club, and The Land Learning Foundation, and receiving “Refuge Partners” awards were: Friends of the Swan Lake National Wildlife Refuge, Mendon Lions Club, John Guthrie, and from our Scouting Program Matthew Anderson



Volunteer of the Year – Carla Epperson



City of Sumner Representatives



Sumner Sportsman's Club



Land Learning Foundation



Friends Group Representatives



Mendon Lions Club Representative



Eagle Scout – Matthew Anderson

- **Refuge Manager's Comments:**